

REMARKS

Applicants thank the Patent Office for acknowledging Applicant's claim to foreign priority, and for indicating that the certified copy of the priority document, United Kingdom Patent Application No. 00312508.5 dated December 22, 2000, has been made of record in the file.

Claims 1-13 have been examined on their merits.

Applicants thank the Patent Office for indicating that claim 13 is allowed.

The Patent Office objects to claims 3 and 6 as being dependent upon a rejected base claim. Applicants thank the Patent Office for indicating that claims 3 and 6 would be allowed if rewritten in independent form. However, instead of rewriting claim 6 in independent form, Applicants respectfully traverse the prior art rejections for the reasons set forth below.

Applicants herein rewrite claim 3 in independent form, and submit that claim 3 is now in condition for allowance.

Claims 1-13 are all the claims presently pending in the application.

1. Claims 1, 2, 4, 5, 7, 8, 11 and 12 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Onaka *et al.* (U.S. Patent No. 6,510,000). Applicants traverse the § 102(e) rejection of claims 1, 2, 4, 5, 7, 8, 11 and 12 for at least the reasons discussed below.

The Patent Office has asserted that Onaka *et al.* teach, *inter alia*, a laser pump source for producing wideband pump radiation signal having a plurality of different wavelengths, and refers to Figure 9 of Onaka *et al.* Applicants respectfully disagree.

In Figure 9 of Onaka *et al.*, each of excitation light source units 601 and 603 has four excitation laser diodes, and each of WDM couplers 7A and 7B duplexes the wavelengths of four rays of light. This is the use of multiple pump sources to produce multiple wavelengths, as in the acknowledged prior art in the present application, whereas claim 1 very clearly recites a laser pump source producing a wideband pump radiation signal having a plurality of different radiation wavelengths. Onaka *et al.* fail to teach or suggest the laser pump source of claim 1.

Based on the foregoing reasons, Applicants submit that claim 1 is allowable over Onaka *et al.*, and further submit that claims 2, 5, 7 and 8 are allowable as well, at least by virtue of their dependency from claim 1. Applicants respectfully request reconsideration and withdrawal of the § 102(e) rejection of claims 1, 2, 4, 5, 7 and 8.

With respect to independent claim 11 and 12, Applicants submit that claims 11 and 12 are allowable over Onaka *et al.* for at least reasons analogous to those discussed above with respect to claim 1. Applicants respectfully request reconsideration and withdrawal of the § 102(e) rejection of claims 11 and 12.

Claim 4 depends from claim 3, and includes all its recitations by virtue of its dependency from claim 3. As noted above, Applicants submit that new independent claim 3 is allowable, and further submit that dependent claim 4 is allowable as well.

2. Claims 1, 9 and 10 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Evans *et al.* (U.S. Patent No. 6,657,774). Applicants traverse the § 102(e) rejection of claims 1, 9 and 10 for at least the reasons discussed below.

The Patent Office has alleged that Evans *et al.* teach, *inter alia*, the laser pump source for producing wideband pump radiation signal having a plurality of different radiation wavelengths, and refer to pumps 22 and 22A shown in the drawings. Applicants respectfully disagree.

The pump laser of Evans *et al.* emits light at a specific wavelength, instead of producing a wideband pump radiation signal having a plurality of different radiation wavelengths. In the amplifier shown in Fig. 1, the pump 22 provides pump light at 1450 nm (Evans *et al.*, col. 4, lines 10-12). Nothing in Evans *et al.* indicates that the pump 22 or 22A produces a wideband pump radiation signal. Although claim 4 of Evans *et al.* recites that the pump outputs light in the 1400-1500 nanometers wavelength range, a skilled artisan would appreciate that 1400-500 nanometers is the range that the single wavelength output of the pump 22 could fall in, not the bandwidth of a wideband pump.

In addition, Evans *et al.* fail to teach or suggest independently adjusting power control of each of a plurality of different radiation wavelengths of a wideband pump radiation signal. Evans *et al.* state that the amount of light provided by the pump 22 may be controlled via input and output 2% tap couplers 25A, 25B, photo diodes 26 and feedback circuit to a voltage-controlled switch coupler 24 and a variable optical attenuator VOA 26. However, the pump 22 provides light at 1450 nm, instead of a wideband pump radiation signal.

Based on the foregoing reasons, Applicants submit that claim 1 is allowable over Evans *et al.*, and further submit that claims 9 and 10 are allowable as well, at least by virtue of their dependency from claim 1. Applicants respectfully request reconsideration and withdrawal of the § 102(e) rejection of claims 1, 9 and 10.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLICATION NO. 10/022,896
ATTORNEY DOCKET NO. Q67643

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

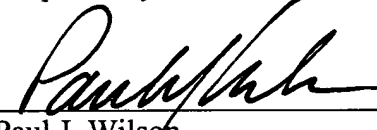
WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: July 7, 2005

Respectfully submitted,


Paul J. Wilson
Registration No. 45,879